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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/454,870	12/03/1999	SUJAL PATEL	REALNET.066A	4345

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EXAMINER

COULTER, KENNETH R

ART UNIT	PAPER NUMBER
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2141

DATE MAILED: 04/08/2004

14

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/454,870

Applicant(s)

PATEL, SUJAL

Examiner

Kenneth R Coulter

Art Unit

2141

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2004 (paper #13; Amendment D).
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) See Continuation Sheet is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8, 11-13, 15-18, 20-22, 24-26, 28-33, 35, 37-45, 48-51, 55-57 and 61-76 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11.13.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

Continuation of Disposition of Claims: Claims pending in the application are 1-6,8,11-13,15-18,20-22,24-26,28-33,35,37-45,48-51,55-57 and 61-76.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3 - 6, 8, 11 - 13, 15 - 18, 20 - 22, 24 - 26, 28 - 33, 35, 37 - 45, 48 - 51, 55 - 57, and 61 - 76 are rejected under 35 U.S.C. 102(b) as being disclosed by Blasbalg (U.S. Pat. No. 4,771,391) (Adaptive Packet Length Traffic Control in a Local Area Network).

2.1 Regarding claim 40, Blasbalg discloses a method of aggregating data packets, the method comprising:

determining, based upon the load of a server computer, whether to aggregate one or more of the data packets into an aggregated data packet with a size, wherein the size of the aggregated data packet exceeds a minimum threshold size without exceeding a maximum threshold size, and therein the minimum threshold size or the maximum threshold size is related to the load of the server computer (Abstract; Fig. 1; col. 5, lines 5 - 15); and

transmitting the aggregated data packet to a client computer (Abstract; Fig. 1; col. 5, lines 5 - 15).

2.2 Per claim 41, Blasbalg teaches that the data packets are not aggregated in an aggregated data packet larger than the size of a maximum transmission unit for any intermediary network device that is in the transmission path between the server computer and the client computer (col. 5, lines 5 - 15).

2.3 Regarding claim 42, Blasbalg discloses determining the server load comprises comparing the number of data packets that are overdue to the total number of data packets (col. 6, lines 15 - 21).

2.4 Per claim 43, Blasbalg teaches determining the server load comprises comparing the number of network events processed by a server program that is executing on the server computer due to exceeding a time out threshold to the total number of network events that the server program processes (col. 6, lines 15 - 21).

2.5 Regarding claim 44, Blasbalg does not explicitly disclose that *network events* are selected from the group comprising: a play command, a pause command, a seek command, a ping command, and a re-send command.
However, the ping command is inherent in Blasbalg because the analysis and tracking of the network in Blasbalg.

Art Unit: 2141

2.6 Per claim 45, Blasbalg teaches that the server load is based at least in part upon the actual transmission rate between the server computer and the client computer (col. 5, lines 5 - 15).

2.7 Per claim 51, Blasbalg teaches that the size of the minimum threshold relates to a quality of presentation of the streamable data objects and the maximum threshold relates to a *maximum transmission unit* (Abstract; col. 5, lines 5 - 15).

2.8 Regarding claims 1, 3 - 6, 8, 11 - 13, 15 - 18, 20 - 22, 24 - 26, 28 - 33, 35, 37 - 39, 48 - 50, 55 - 57, and 61 - 76, the rejection of claims 40 - 45 and 51 (paragraphs 2.1 - 2.7 above) under 35 USC 102(b) applies fully.

In addition, with regard to claims 15, 16 and 24, 25, Blasbalg discloses that the process of transmitting the streamable data objects from server to client comprises increasing the packet size of one or more data packets (Abstract; col. 5, lines 5 - 15), and either increasing or decreasing the frequency of transmission of one or more data packets (col. 4, lines 29 - 37); but does not explicitly disclose increasing the number of channels that are used to transmit the streamable data objects,

The Examiner hereby takes official notice that this feature is commonplace in the streamable multimedia art in order to increase the speed of transmission, and therefore does not represent patentably distinct features over the prior art.

Art Unit: 2141

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1, 3 - 6, 8, 11 - 13, 15 - 18, 20 - 22, 24 - 26, 28 - 33, 35, 37 - 45, 48 - 51, 55 - 57, and 61 - 76 are rejected under 35 U.S.C. 102(e) as being disclosed by Miller et al. (U.S. Pat. No. 6,014,707) (Stateless Data Transfer Protocol With Client Controlled Transfer Unit Size).

4.1 Regarding claim 40, Miller discloses a method of aggregating data packets, the method comprising:

determining, based upon the load of a server computer, whether to aggregate one or more of the data packets into an aggregated data packet with a size, wherein the size of the aggregated data packet exceeds a minimum threshold size without

Art Unit: 2141

exceeding a maximum threshold size, and therein the minimum threshold size or the maximum threshold size is related to the load of the server computer (Abstract; col. 2, lines 1 - 8; col. 5, lines 38 - 49); and

transmitting the aggregated data packet to a client computer (Abstract; Fig. 1).

4.2 Per claim 41, Miller teaches that the data packets are not aggregated in an aggregated data packet larger than the size of a maximum transmission unit for any intermediary network device that is in the transmission path between the server computer and the client computer (col. 5, lines 38 - 49).

4.3 Regarding claim 42, Miller discloses determining the server load comprises comparing the number of data packets that are overdue to the total number of data packets (col. 8, lines 10 - 21).

4.4 Per claim 43, Miller teaches determining the server load comprises comparing the number of network events processed by a server program that is executing on the server computer due to exceeding a time out threshold to the total number of network events that the server program processes (col. 8, lines 10 - 21).

4.5 Regarding claim 44, Miller does not explicitly disclose that *network events* are selected from the group comprising: a play command, a pause command, a seek command, a ping command, and a re-send command (Figs. 7, 8).

4.6 Per claim 45, Miller teaches that the server load is based at least in part upon the actual transmission rate between the server computer and the client computer (col. 5, lines 38 - 49).

4.7 Per claim 51, Miller teaches that the size of the minimum threshold relates to a quality of presentation of the streamable data objects and the maximum threshold relates to a *maximum transmission unit* (col. 5, lines 38 - 49).

4.8 Regarding claims 1, 3 - 6, 8, 11 - 13, 15 - 18, 20 - 22, 24 - 26, 28 - 33, 35, 37 - 39, 48 - 50, 55 - 57, and 61 - 76, the rejection of claims 40 - 45 and 51 (paragraphs 4.1 - 4.7 above) under 35 USC 102(b) applies fully.

In addition, with regard to claims 15, 16 and 24, 25, Miller discloses that the process of transmitting the streamable data objects from server to client comprises increasing the packet size of one or more data packets (col. 5, lines 38 - 49), and either increasing or decreasing the frequency of transmission of one or more data packets (col. 2, lines 9 - 15); but does not explicitly disclose increasing the number of channels that are used to transmit the streamable data objects,

The Examiner hereby takes official notice that this feature is commonplace in the streamable multimedia art in order to increase the speed of transmission, and therefore does not represent patentably distinct features over the prior art.

5. Claims 1, 3 - 6, 8, 11 - 13, 15 - 18, 20 - 22, 24 - 26, 28 - 33, 35, 37 - 45, 48 - 51, 55 - 57, and 61 - 76 are rejected under 35 U.S.C. 102(e) as being disclosed by Shaffer et al. (U.S. Pat. No. 6,003,089) (Method for Constructing Adaptive Packet Lengths in a Congested Network).

5.1 Regarding claim 40, Shaffer discloses a method of aggregating data packets, the method comprising:

determining, based upon the load of a server computer, whether to aggregate one or more of the data packets into an aggregated data packet with a size, wherein the size of the aggregated data packet exceeds a minimum threshold size without exceeding a maximum threshold size, and therein the minimum threshold size or the maximum threshold size is related to the load of the server computer (Abstract; Fig. 4; col. 5, lines 1 - 7); and

transmitting the aggregated data packet to a client computer (Abstract).

5.2 Per claim 41, Shaffer teaches that the data packets are not aggregated in an aggregated data packet larger than the size of a maximum transmission unit for any intermediary network device that is in the transmission path between the server computer and the client computer (col. 7, lines 10 - 13; col. 8, lines 6 - 13).

Art Unit: 2:141

5.3 Regarding claim 42, Shaffer discloses determining the server load comprises comparing the number of data packets that are overdue to the total number of data packets (col. 5, lines 61 - 65).

5.4 Per claim 43, Shaffer teaches determining the server load comprises comparing the number of network events processed by a server program that is executing on the server computer due to exceeding a time out threshold to the total number of network events that the server program processes (col. 5, lines 61 - 65).

5.5 Regarding claim 44, Shaffer does not explicitly disclose that *network events* are selected from the group comprising: a play command, a pause command, a seek command, a ping command, and a re-send command.

However, the ping command is inherent in Shaffer because of the determination of available media (Fig. 2, item 80).

5.6 Per claim 45, Shaffer teaches that the server load is based at least in part upon the actual transmission rate between the server computer and the client computer (col. 4, lines 40 - 58).

5.7 Per claim 51, Shaffer teaches that the size of the minimum threshold relates to a quality of presentation of the streamable data objects and the maximum threshold relates to a *maximum transmission unit* (col. 5, lines 1 - 7).

Art Unit: 2:141

5.8 Regarding claims 1, 3 - 6, 8, 11 - 13, 15 - 18, 20 - 22, 24 - 26, 28 - 33, 35, 37 - 39, 48 - 50, 55 - 57, and 61 - 76, the rejection of claims 40 - 45 and 51 (paragraphs 5.1 - 5.7 above) under 35 USC 102(e) applies fully.

In addition, with regard to claims 15, 16 and 24, 25, Shaffer discloses that the process of transmitting the streamable data objects from server to client comprises increasing the packet size of one or more data packets (col. 5, lines 1 - 7), and either increasing or decreasing the frequency of transmission of one or more data packets (col. 5, lines 1 - 7); but does not explicitly disclose increasing the number of channels that are used to transmit the streamable data objects,

The Examiner hereby takes official notice that this feature is commonplace in the streamable multimedia art in order to increase the speed of transmission, and therefore does not represent patentably distinct features over the prior art.

Response to Arguments

6. Applicant's arguments filed 1/20/04 have been fully considered but they are not persuasive.

Applicant states that Blasbalg does not disclose providing a maximum packet size.

Examiner disagrees.

Blasbalg teaches an equivalent average length of the packets.

Art Unit: 2141

Applicant states that Miller fails to determine a maximum transmission unit of an intermediary device.

Examiner disagrees.

Miller specifically states that "**the server 12**, upon receiving a request, **may further reduce the size** and rate of **data packets** that will be used for the transfer, **depending on the current loads of both the server 12** and the network 10." (col. 5, lines 43 – 47).

Applicant states that Shaffer fails to disclose determining in a server a maximum transmission unit of an intermediary device between the server and a client.

Examiner disagrees.

Shaffer discloses that the "maximum size here is the **maximum size allowed by the network** minus the minimum packet size." (col. 8, lines 7 – 9).

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

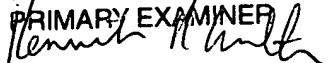
Art Unit: 2141

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth R Coulter whose telephone number is 703 305-8447. The examiner can normally be reached on 5 4 9.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on 703 305-4003. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KENNETH R. COULTER
PRIMARY EXAMINER


krc